

REMARKS

This Reply is in response to the Office Action mailed on December 13, 2007 in which claims 1-36 and 38-42 were rejected. Claims 1-36 and 38-42 are presented for reconsideration and allowance.

I. Claim Objections

Section 2 of the Office Action objected to claim 42 noting an informality. In response, claim 42 is amended as suggested in the Office Action to correct typographical error. Accordingly, Applicants request that the objection to claim 42 be withdrawn.

II. Rejection of Claims 1, 2, 5-10, 14-16, 18, 20-28, 30 31 and 40 under 35 USC 103(a) Based upon Chu and Bartok

Section 4 of the Office Action rejected claims 1, 2, 5-10, 14-16, 18, 20-28, 30 31 and 40 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060. For the reasons which follow, the rejection of such claims should be withdrawn.

A. Claim 1

Claim 1 recites an electronic device which includes a switch actuation mechanism configured to actuate against a point of contact of a switch a first time in response to a first manual input to actuate the device to a first state and to actuate against the same point of contact of the switch a second time in response to a second manual input to actuate the device to a second state. The second input has a least one characteristic, other than time at which it is performed, distinct from the first input.

Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism that actuates against the same point of contact of a switch in response to first and second distinct manual inputs to actuate a device between first and second states. As

acknowledged by the Office Action, Chu does not disclose to input having a eharacteristic, other than the time at which they are performed, distinct from one another. As a result, the Office Action attempts to additionally rely upon Bartok by attempting to mish mash the completely distinct teachings of Chu and Bartok together in an attempt to read the hypothetical combination upon the claims. In particular, the Office Action asserts that:

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have usee a single point of contact with a two-surface switch face like that of Bartok, because a single-point-of-contact construction is simpler than a two-point-of-contact construction, and a two-surface switch (e.g. with different markings or texture for ON and OFF) would make it easier for user with poor vision to distinguish between the two functions.

(Office Action dated December 13, 2007, page 4).

However, the alleged hypothetical combination of Chu and Bartok lacks merit because: (1) the alleged motivation lacks merit and (2) the hypothetical combination would destroy the intended function and principle of operation of each of the combined references.

(1) The alleged motivation lacks merit.

The assertion that it would be obvious to use a single point of contact (Chu) with a two surface switch face (Bartok) lacks credulity. Although it may be true that a single point of contact instruction is simpler than a two point of contact instruction, this ignores the basic fact that a single point of contact construction only requires a single surface switch face while a two point of contact switch requires a two surface switch face. It would make little sense to one of ordinary skill in the art, **absent Applicant's own disclosure**, to put a two surface switch face used for a two point of contact switch on a single point of contact switch. Bartok requires a two surface switch face because Bartok requires pivoting of face (108), Chu does not. Applying a rationale analogous to the rationale asserted by the Examiner, one of ordinary skill in the art would alternatively use a single surface switch face in Chu rather than a two surface switch face

because (1) a two surface switch face would serve no function in Chu AND a single surface switch face construction "is simpler than" a two surface switch face.

The Examiner's argument is like arguing that it would be obvious to put a stick shift from a manual transmission on a vehicle having an automatic transmission. In both cases, the modification would serve no previously identified purpose and may indeed impair or destroy the intended functioning of the device which is modified. Once again, absent Applicants' own disclosure, no motivation is disclosed in either Chu or Bartok that would lead one of ordinary skill in the art to apply a rocker switch cover or face (108) of Bartok to a single point of contact, non-rocker switch of Chu.

(2) The alleged combination would destroy the principle of operation and functioning of both original devices of Chu and Bartok.

The rejection is also improper because the alleged combination would destroy the principle of operation and intended functioning of both of the combined referenees. (See MPEP 2143.01 THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE and THE PROPOSED MODIFICATION CANNOT CHANGE THE PRINCIPLE OF OPERATION OF A REFERENCE.

On one hand, Chu requires that central operating member 141 be linearly depressed so as to variably compress resistive surface 124 of soft knob 123 against track 133 to vary the resistance and to vary the speed of the motor. To somehow add the pivoting surface 108 Bartok to Chu would prevent Chu from even working and would surely at least change its principle of operation.

On the other hand, Bartok requires two surface switch face 108 to pivot so as to alternately pivot rocking contact 138 into contact with terminals 120, 122. To alternatively

replace two surface switch face 108 of Bartok with a central operating member 141 of Chu would prevent Bartok from functioning.

Examiner's Response to Such Points

In response to such points, the Examiner (1) incorrectly argues that modifying Chu based upon Bartok would not destroy or alter the intended functioning principle of operation of Bartok and (2) continues to rely upon an alleged motivation that (A) is not even applicable to the alleged combination proposed by the Examiner and (B) is based upon Applicant's own disclosure.

(1) Modifying Chu based upon Bartok would destroy or alter the intended functioning and principle of operation of Chu and Bartok.

The Examiner attempts to argue that:

Since both surfaces of the face of the single point of contact switch of Chu would actuate on the same point of contact via the same actuation mechanism, the addition of the second surface would simply add a second point of actuation to the switch, the second point of actuation functioning the same as the first (i.e. pressing the first surfaced twice would perform the same sequence of functions as pressing the first surfaced once followed by pressing the second surface), thus allowing the switch to be actuated from two different locations (these two surfaces). Therefore, the intended function and principle of Chu would be preserved if a face with two surfaces was used.

(Office Action dated December 13, 2007, pages 10-11).

However, the Examiner's line of argument is superficial. The Examiner's line of argument ignores the ACTUAL teachings of Bartok and requires a complete reconstruction and reengineering of both Chu and Bartok.

First, the rocker switch of Bartok requires a central fulcrum provided by blades 116, 118 to function. In contrast, Chu requires that this central location include the micro switch 110. If one replaces micro switch 110 of Chu with blades 116, 118 (the fulcrum) of Bartok, then the

resulting hypothetical combination does not include a single point contact switch. Alternatively, if one were to keep the single point contact switch of Chu, and omit the fulcrum, the two-point rocker switch of Bartok would not work.

Second, one of the main principles of operation of Chu is that depressment of member 141 a first distance results in pressure being applied at a first location (at micro switch 110) and that depressment of member 141 a second greater distance results in pressure also being applied at a second distinct location to compress knob 123.

Adding the rocker switch of Bartok to Chu would change this principle of operation. With the rocker switch of Bartok, depressment of the left side of actuator 108 (as seen in Figure 4) to a first extent results in terminal 122 being contacted at by rocker contact 152. Depressment of the same left side of actuator 108 to a second greater extent only results in the exact same terminal 122 being contacted by rocker contact 152. With Bartok, two distinct switches or electrical circuits are not actuated depending upon the extent to which actuator 108 is depressed. To add the rocker switch of Bartok to Chu would change the principle of operation of Chu which requires that distinct electrical circuits or switches (micro switch 110 AND variable resistor 120) be selectively actuated by varying the extent to which a button is depressed.

Third, the Examiner asserts that he is characterizing not only rocking contact 138 of Bartok as part of the switch, but also terminals 112, 120 and 122. (Office Action dated December 13, 2007, page 11). However, if this is the case, this results in the entire rocker switch of Bartok replacing the entire switch assembly of Chu. This hypothetical combination would not include a micro switch 110 and would not include a single point contact switch.

(2) The Examiner's alleged motivation for modifying Chu based upon Bartok (A) is not even applicable to the alleged combination proposed by the Examiner and (B) is based upon Applicant's own disclosure.

A. The Examiner's alleged motivation does not support the Examiner's alleged combination.

Once again, the Examiner asserts that it would be obvious to modify Chu based upon Bartok to add the rocker switch of Bartok to the single point of contact allegedly disclosed by Chu. The Examiner specifically argues that "the intended function and principle of Chu would be preserved if a face with two surfaces was used." (Office Action dated December 13, 2007, page 11).

However, the alleged motivation set forth by the Examiner is that it would be obvious to replace the two-point-of-contact construction of Bartok with the single-point-of contact construction of Chu because the single-point-of-contact construction is allegedly simpler. (Office Action dated December 13, 2007, page 4). The Examiner's motivation does not match up. To reject the claims, the Examiner relies upon the assertion that it would be obvious to modify Chu based upon Bartok. However, the alleged motivation provided by the Examiner is for modifying Bartok based upon Chu. Thus, the Examiner has failed to establish a prima facie case of obviousness by failing to provide a motivation for the alleged combination relied upon rejected claims

B. The alleged motivation is based upon impermissible hindsight reasoning using Applicant's own disclosure as a blueprint.

On one hand, the Examiner seems to argue that it would be obvious to take the rocker switch of Bartok and add it to the switch assembly of Chu. As noted above, the Examiner has failed to provide any motivation for this combination. Moreover, absent Applicant's own disclosure, what would possibly lead one of ordinary skill in the art to make such a modification? The rocker switch of Chu is for the specific purpose of ALTERNATELY contacting terminal 120 OR terminal 122. Chu does **not** have this need. Nowhere in Chu or Bartok is there any suggestion of any benefit that could be achieved by adding a rocker switch to actuate the micro switch 110 of Chu.

Alternatively, the Examiner seems to take a position that it would be obvious to replace the two-point-of-contact construction of Bartok with the single-point-of-contact construction of Chu "because a single-point-of-contact construction' is simpler than a two-point-of-contact

construction." If this is indeed the Examiner's actual position, then why would one of ordinary skill in the art keep the rocker switch components of Bartok? With a single-point-of-contact switch, absent Applicant's own disclosure, there would be presumably no need for the rocker switch components. Why not just have a single push button as was conventional prior to Applicant's own disclosure? Once again, where in Chu or Bartok is there any suggestion for replacing a two-point-contact switch with a single-point-of-contact switch WHILE keeping those components that were ONLY originally used because a two-point-contact switch was employed?

Both of the Examiner's potential positions, (1) modifying Chu based upon Bartok or (2) modifying Bartok based upon Chu appears to be based upon the impermissible use of Applicant's own disclosure as a blueprint. Absent Applicant's own disclosure, the Examiner's potential positions make little sense. Accordingly, the rejection of claim 1 is improper and should be withdrawn. The rejection of claims 2, 5-10, 14-16, 18, 20, 21, which depend from claim 1, should be withdrawn for at least the same reasons.

B. Claim 22

Claim 22 recites an electronic device including a switch and means along a face for actuating the switch. The switch is configured such that successive actuations of the switch that are identical, other than the time at which they are performed, actuate the device between the first state and a second state. The means along a face actuates the switch a first time using a first manual input and a second time using a second manual input having at least one characteristic, other than the time it which is performed, distinct from the first manual input.

Neither Chu nor Bartok, alone or in combination, disclose a switch that is configured such that successive identical actuations of the switch actuated device between two states. In Chu, different states can only be attained by different or distinct actuations (distinct degrees of compression of surface 124 across track 133). In Bartok, distinct states can only be achieved by distinct pivoting of rocking contact 138. Accordingly, the rejection of claim 22 is improper and should be withdrawn for least this reason.

Moreover, as noted above with respect to the rejection of claim 1, the alleged hypothetical combination of Chu and Bartok lacks merit because: (1) the alleged motivation lacks merit and (2) the hypothetical combination would destroy the intended function and principle of operation of each of the combined references. Accordingly, the rejection of claim 22 is improper and should be withdrawn. Claims 23 and 24 depend from claim 22 and overcome the rejection for the same reasons.

C. Claim 25

Claim 25 recites a method for actuating an electronic device between a first state and a second state. The method includes providing a switch configured such that successive actuations of the switch that are identical other than the time at which they are performed in actuate the device between the first state and a second state. The method further includes applying a first manual input so as to actuate the switch a first time and applying a second manual input so as to actuate the switch a second time, wherein the first and second manual inputs are distinct.

Neither Chu nor Bartok, alone or in combination, disclose a switch that is configured such that successive identical actuations of the switch actuated device between two states. In Chu, different states can only be attained by different or distinct actuations (distinct degrees of compression of surface 124 across track 133). In Bartok, distinct states can only be achieved by distinct pivoting of rocking contact 138. Accordingly, the rejection of claim 25 is improper and should be withdrawn for least this reason.

Moreover, as noted above with respect to the rejection of claim 1, the alleged hypothetical combination of Chu and Bartok lacks merit because: (1) the alleged motivation lacks merit and (2) the hypothetical combination would destroy the intended function and principle of operation of each of the combined references. Accordingly, the rejection of claim 25 is improper and should be withdrawn. Claims 28 and 30 depend from claim 25 and overcome the rejection for the same reasons.

D. Claim 2

Claim 2 depends from claim 1 and recites that a function is performed when the device is in the first state and that the function is discontinued when the devices in the second state.

Neither Chu nor Bartok, alone or in combination, disclose the device of claim 2. In rejecting claim 2, the Office Action attempts to argue that it would be obvious to apply the rocker switch face 1080 Bartok to the switch of Chu. However, Chu does not disclose a switch, wherein a function is performed when the switch of the devices in the first state and wherein the function is discontinued when the switch of the devices in the second state. In contrast, the switch disclosed by Chu provides variable speed control of the motor. Depressment of operating member 141 of Chu turns on the motor. Further depressment increases the speed of the motor. Chu does not disclose a first depressment which turns on the motor and a second depressment which shuts off the motor.

In his rejection of claim 2, the Examiner argues that "if function is performed when the device of Chu is in a first date (On) and discontinued when the devices and a second state (off)." (See Office Action dated December 13, 2007, page 4).

However, the first state and the second state recited in claim 2 are defined in claim 1 which recites at the first date and the second states are the result of successive actuations of a switch. Once again, in contrast, in Chu, a first actuation results in the motor being turned on. A second successive actuation ALSO results in the motor being turned on. Thus, the rejection of claim 2 should be withdrawn for this additional reason.

E. Claim 9

Claim 9 depends from claim 5 which recites that the switch actuation mechanism includes a first movable surface and a second movable surface. Claim 9 further recites that the first movable surface has a first indicia while the second movable surface has a second indicia distinct from the first indicia.

Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism having to services, wherein each service is provided with a distinct indicia. In rejecting claim 9, the Office Action attempts to assert that it would be obvious to add the rocker switch of Bartok onto the non-rocker switch of Chu. Even assuming, *arguendo*, that such a modification had any merit, there would still be absolutely no reason to provide the rocker switch with distinct indicia since depression or other movement of the two surfaces having distinct in DC a would NOT correlate to a distinct function. Once again, Chu provides variable motor speed control based on the extent of depression. Depressing distinct portion would not necessarily result in distinct binary functions. Accordingly, the rejection of claim 9 should be withdrawn for least this additional reason.

F. Claim 21

Claim 21 depends from claim 1 and recites at the switch actuation mechanism is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed in lieu of the second input.

Neither Chu nor Bartok, alone or in combination, disclose or suggest a switch actuation mechanism that is configured to also actuate the switch the second time in response to a third input identical to the first input, other than the time at which it is performed in lieu of the second input. Depression of the same side of the rocker switch of Bartok will not result in actuation of a device to different states. Likewise, depression of central operating member 141 of Chu to the same extent at distinct times will not result in the motor being driven at distinct speeds. Accordingly, the rejection of claim 21 should be withdrawn for least this additional reason.

II. Rejection of Claims 3, 4 and 19 under 35 USC 103(a) Based upon Chu, Bartok and Downing

Section 6 of the Office Action rejected claims 3, 4 and 19 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060 and further

in view of Downing et al. US Patent 6,075,925. Claims 3, 4 and 19 depend from claim 1 and overcome the rejection for the same reasons discussed above with respect to claim 1. Downing fails to satisfy the deficiencies of Chu and Bartok.

III. Rejection of Claims 9-13 under 35 USC 103(a) Based upon Chu, Bartok and Parks

Section 7 of the Office Action rejected claims 9-13 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060 and further in view of Parks et al. US Patent 5,877,746. Claims 9-13 depend from claim 1 and overcome the rejection for the same reasons discussed above with respect to claim 1. Parks fails to satisfy the deficiencies of Chu and Bartok.

Moreover, claims 13 depends from claim 12 and further recites that a function is performed when the device is in the first state and that the function is discontinued when the devices in the second state.

Neither Chu, Bartok nor Parks, alone or in combination, disclose the device of claim 13. In rejecting claim 13, the Office Action attempts to argue that it would be obvious to apply the rocker switch face 108 of Bartok to the non-rocker switch of Chu. However, Chu does not disclose a switch, wherein a function is performed when the switch of the device is in the first state and wherein the function is discontinued when the switch of the device is in the second state. In contrast, the switch disclosed by Chu provides variable speed control of the motor. Depressment of operating member 141 of Chu turns on the motor. Further depressment increases the speed of the motor. Chu does not disclose a first depressment which turns on the motor and a second depressment which shuts off the motor.

In apparent response to such previously raised points, the Office Action dated December 13, 2007 further attempts to argue that:

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the device of Chu in view of Bartok with green and red start and stop buttons, as taught by

Parks, so that a novice user can determine which button to press to perform a given function and be able to stop a device in an emergency.

(Office Action dated December 13, 2007, page 7).

However, this assertion makes little sense given that Chu does **not** disclose separate start and stop buttons. Chu does **not** disclose that successive actuations turn the motor of Chu on and off. In complete contrast, the motor of Chu is turned on upon depressment of member 141 and is turned off upon release of member 141. How could one use red and green start and stop buttons to turn on and turn off the device given the ACTUAL way that Chu operates? Thus, the rejection of claim 13 should be withdrawn for this additional reason.

IV. Rejection of Claims 17, 29, 35 and 41 under 35 USC 103(a) Based upon Chu, Bartok and Feaster

Section 8 of the Office Action rejected claims 17, 29, 35 and 41 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060 and further in view of Feaster US Patent 4,191,867. Claims 17, 29 and 35 depend from claims 1, 25 and 32, respectively, and overcome the rejection for the same reasons discussed above. Feaster fails to satisfy the deficiencies of Chu, Bartok or Mori. Claims 17, 29, 35 and 41 overcome the rejection for the following additional reasons.

Claim 17, 29, 35 and 41 each recites an actuation member slidable along the face, wherein the first input includes sliding actuation member in a first manner or direction and wherein the second input includes sliding actuation member and a second manner or direction.

Neither Chu, Bartok nor Feaster, alone or in combination, disclose or suggest a mechanism (claim 17), the method (claim 29), the image forming device (claim 35) or the electronic device (claim 41) wherein the actuation mechanism includes an actuation member that slides along a face. In rejecting such claims, the Office Action once again attempts to hodgepodge multiple references together while disregarding the fact that such modifications

destroy the intended functioning of the modified devices. With respect to the reliance upon Feaster, the Office Action fails to provide any support for the conclusory statement that one with a disability may more easily slide a slidable actuation member than a push a button. This alleged motivation appears to come out of thin air.

Moreover, neither Chu nor Bartok would appear to permit use of a sliding switch plate. As noted above, Bartok requires pivotal movement. Chu requires linear movement. Any such modification would appear to require a complete reconstruction, selectively picking and choosing features from each of the references so as to read upon the claim limitations. The prior art simply lacks any such motivation for such a mish mashing of references. Accordingly, the rejection of claim 17, 29, 35 and 41 should be withdrawn.

V. Rejection of claims 32-34, 36 and 38 under 35 USC 103(a) Based upon Chu, Bartok and Mori

Section 9 of the Office Action rejected claims 32-34, 36 and 38 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060 and further in view of Mori et al. US Patent 6,337,961. Claims 32-34, 36 and 38 overcome the rejection.

A. Claim 32

Claim 32 recites a switch configured such that successive actuations of the switch actuates an image forming engine between a first state and a second state, a first movable input surface and a second movable input surface. The first movable input surface and the second movable input surface are both rigidly coupled to a post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state and such that movement of the second movable input surface linearly moves the post along the axis against the switch to actuate the engine to a second state.

Neither Chu, Bartok nor Mori, alone or in combination, disclose or suggest first and second movable input surfaces that are both coupled to a post such that movement of the first movable input surface linearly moves the post along an axis against the switch to actuate the engine to the first state and such that movement of the second movable input surface linearly moves the post along the axis against the switch to actuate the engine to a second state. In rejecting claim 32, the Office Action takes the position that it would be obvious to replace central operating member 141 of Chu with the rocker switch plate 108 of Bartok. Rocker switch plate 108 of Bartok does not linearly move a post along an axis against a switch. Claims 33-34, 36 and 38 depend from claim 32 and overcome the rejection for the same reasons.

B. Claim 34

Claim 34 depends from claim 32 and recites at the first movable input surface and the second movable input surface PIVOT to successively actuate the switch. Thus, the limitations of claim 34, in conjunction with the limitations of claim 32, result in movable input surfaces that pivot to linearly move a post against a switch.

Neither Chu, Bartok nor Mori disclose movable input surfaces that pivot to linearly move a post against a switch. Bartok only pivots while Chu only linearly moves. Any proposed mishmash of the two would lack any motivation provided by either reference and would appear to be a reconstruction based upon impermissible hindsight reasoning using Applicants' own disclosure as a blueprint. Accordingly, the rejection of claim 34 is improper and should be withdrawn.

VI. Rejection of Claims 39 under 35 USC 103(a) Based upon Bartok, Mori and Parks

Section 10 of the Office Action rejected claim 39 under 35 USC 103(a) as being unpatentable over Chu US Patent 6,774,509 in view of Bartok US Patent 6,459,060, further in view of Mori et al. US Patent 6,337,961 and further in view of Parks et al. US Patent 5,877,746. Claim 39 depends from claim 32 and overcomes the rejection for the same reasons discussed

above with respect to the rejection of claim 32 based upon Chu, Bartok and Mori. Parks fails to satisfy the deficiencies of Chu, Bartok and Mori.

VII. Conclusion

After amending the claims as set forth above, claims 1-36 and 38-42 are now pending in this application.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 08-2025. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 08-2025. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 08-2025.

Respectfully submitted,

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By Todd A. Rathe

RATHE PATENT & IP LAW
Customer No. 22879
Telephone: (262) 478-9353
Facsimile: (262) 238-1469

Todd A. Rathe
Attorney for Applicant
Registration No. 38,276